

CONFIDENTIAL

Adm - 13, 1 MFR

Approved For Release 2002/10/30 : CIA-RDP75B00514R000100180004-3

25X1

25X1

DD/S&T 545-72

22 February 1972

MEMORANDUM FOR THE RECORD

SUBJECT: Orthogonal Processor Development by

25X1

1. About a year ago (2 February 1971),

25X1

of [redacted] described their efforts over the past eight years toward the development of a new type (orthogonal) processor. In essence, this development involves a modification to any standard computer to permit the memory to be accessed so that words in memory may be inspected logically using only some internal fragments of the word. Thus, data words do not have to be brought from memory and analyzed logically and returned to memory as would normally be the case. This characteristic can provide exceptional speed and memory in a variety of applications. For example, sorting on frequency, pulse width, or other characteristics which might be of interest could be done if the word represented an ensemble of signal characteristics.

2. At the time of the presentation, [redacted] was looking for Agency support to actually implement these concepts into working hardware. The company has spent over a million dollars of its own money over the eight year period of this development.

25X1

3. [redacted] advised me today that [redacted] anticipates a contract within the next 30 days from [redacted] for the development of the system. The effort will be funded jointly by NSA [redacted] Army, and Navy (Julian Lake) as well as the Air Force. The system will be designed to work as a signal processor with receivers covering a [redacted]. I believe the computer for the program will be a PDP-1145.

25X1

25X1

25, 1

2581

4. Some time after the contract is in hand, [redacted]
will arrange for a status presentation to interested Agency

25x1

**DD/S&T
FILE COPY**

Approved For Release 2002/10/30 : CIA-RDP75B00514F00100180

CONFIDENTIAL

[redacted] 25X1

Approved For Release 2002/10/30 : CIA-RDP75B00514R000100180004-3

CONFIDENTIAL

SUBJECT: Orthogonal Processor Development by [redacted]

25X1

officers. Since certain non-recurrable costs, such as the development of some chips, will have been absorbed by the Air Force contract, costs for other applications, including software, should be reduced.

[redacted] 25X1

[redacted]
Special Assistant to the
DD/S&T

Distribution:

Orig. - For the Record

1 - Dr. D. Steininger

1 - Mr. J. Iams

1 - Mr. C. Briggs

1

1

1

1

1

1

- S&T Req.

O/DD/S&T: [redacted]

(22 Feb. 72)

25X1

25X1

Approved For Release 2002/10/30 : CIA-RDP75B00514R000100180004-3

CONFIDENTIAL